1. A method of determining reliability with regard to a first factor which is dependent on a set of at least two second factors, each of the second factors being diversely subject to a third factor, data concerning the second factors being stored in storage accessible to a processor and the method comprising the steps performed in the processor of:

using the data to determine correlations between second factors with regard to the third factor;

using the correlations in determining a standard deviation of the third factor for the set; and

using the first factor and the standard deviation in determining a reliability with regard to the first factor.

2. The method set forth in claim 1 wherein the step of using the correlations comprises the steps of:

determining a standard deviation for each of the second factors with regard to the third factor;

using the correlations and the standard deviations for the second factors in determining covariances between the second factors with regard to the third factor; and

using the covariances in determining the standard deviation of the third factor for the set.

3. The method set forth in claim 1 wherein:

there is a plurality of the third factors.

4. The method set forth in any one of claims 1 through 3 wherein:

the set of at least two second factors is a set of uses of a resource, each use in the set having a return;

the first factor is a valuation for the entire set of uses; and

the third factor is a risk which is diverse with regard to the returns from the uses .

5. The method set forth in claim 4 wherein:

the uses in the set are classes of assets and the resource is funds for investment in the classes of assets.

6. The method set forth in any one of claims 1 through 3 wherein:

the processor performs the steps of the method as part of an optimization of the first factor; and

the reliability is used as a constraint in the optimization.

7. The method set forth in claim 6 wherein:

the set of at least two second factors is a set of uses for a resource, each use in the set having a return;

the first factor is a valuation for the entire set of uses; and

the third factor is a risk which is diverse with regard to the returns from the uses.

8. The method set forth in claim 7 wherein:

the uses are classes of assets and the resource is funds to be invested in the classes.

9. The method set forth in claim 8 wherein:

the optimization optimizes the valuation by varying the percentages of the resource used for the assets in the classes.

10. The method set forth in claim 8 wherein:

the valuation is computed using real option techniques.

11. A method of optimizing a first factor which is dependent on a set of at least two second factors, each of the second factors being diversely subject to a third factor, data concerning the second factors being stored in storage accessible to a processor and the method comprising the steps performed in the processor of:

finding a particular configuration of the set of second factors that optimizes the first factor; and

employing a constraint during the step of finding the particular configuration that specifies a reliability of the first factor with regard to the third factor which must be satisfied by the particular configuration.

12. The method set forth in claim 11 wherein:

there is a plurality of the third factors.

13. The method set forth in claim 11 further comprising the steps of:

using the data to determine correlations between the second factors with regard to the risk; and

using the correlations and the particular configuration to determine reliability of the first factor for the particular configuration.

14. The method set forth in claim 13 wherein the step of using the correlations further comprises the steps of:

using the correlations in determining a standard deviation of the third factor for the particular configuration; and

using the first factor for the particular configuration and the standard deviation therefor in determining the reliability of the first factor.

15. The method set forth in claim 14 wherein the step of using the correlations in determining a standard deviation of the third factor for the particular configuration further comprises the steps of:

determining a standard deviation for each of the second factors with regard to the third factor; and

using the correlations and the standard deviations for the second factors in determining covariances between the second factors with regard to the third factor; and

using the covariances and the particular configuration in determining the standard deviation of the particular configuration.

16. The method set forth in any one of the claims 11 through 15 wherein:

the set of at least two second factors is a set of uses of a resource, each use in the set having a return;

the first factor is a valuation for the entire set of uses; and

the third factor is a risk which is diverse with regard to the returns from the uses.

17. The method set forth in claim 16 wherein:

the uses in the set are classes of assets.

18. The method set forth in claim 16 wherein:

valuations for the set of uses are found using real option techniques.

19. A method of allocating investment funds among a set of at least two asset classes to optimize valuation of the asset classes over a period of time, data concerning the asset classes being stored in storage accessible to a processor and the method comprising the steps performed in the processor of:

employing a linear optimization program to optimize the valuation and

in the linear optimization program, using a real option function to determine valuation for each asset class over the period of time for a particular allocation of the funds to the asset class.

20. The method set forth in claim 19 wherein:

the data concerning the asset classes further indicates for each asset class a risk over the period of time and the method further comprises the step of:

employing a constraint in the linear optimization program that specifies a reliability of a return for the portfolio for a particular allocation of funds to the asset classes in the set.

21. The method set forth in claim 20 wherein:

there is a plurality of risks.

22. The method set forth in claim 20 further comprising the steps of:

using the data to determine correlations between the asset classes with regard to the risks of the asset classes; and

using the correlations and the particular allocation of funds to determine the reliability of the return for the portfolio.

23. The method set forth in claim 22 wherein the step of using the correlations further comprises the steps of:

using the correlations in determining a standard deviation of the risk for the particular configuration; and

using the return for the particular allocation of funds and the standard deviation therefor in determining the reliability of the first return.

24. The method set forth in claim 23 wherein the step of using the correlations in determining a standard deviation of the risk for the particular allocation of funds further comprises the steps of:

determining a standard deviation for each of the asset classes with regard to the risk; and

using the correlations and the standard deviations for the asset classes in determining covariances between the asset classes with regard to the risk; and

using the covariances and the particular allocation of funds in determining the standard deviation of the particular allocation of funds.